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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/568,849  | 02/15/2006  | Ziyi Cheng           | CHEN0006                   | 6946                   |
| 23900   | 7590        | 04/28/2008           |                            |                        |
| J C PATENTS, INC.<br>4 VENTURE, SUITE 250<br>IRVINE, CA 92618 |             |                      | EXAMINER<br>WALK, SAMUEL J |                        |
|   |             |                      | ART UNIT<br>2612           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>04/28/2008    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/568,849 | <b>Applicant(s)</b><br>CHENG, ZIYI |  |
|                              | <b>Examiner</b><br>SAMUEL J. WALK    | <b>Art Unit</b><br>2612            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The use of the trademarks USA Pacific Crest Corporation on pages 52-53 and Volkswagenwerk Aldi on page 54 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Objections***

3. Claim 44 is objected to because of the following informalities: in line 8, the term "end" should read as "ending". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 33-35, 36-42, 44 and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding Claims 33-35, 36-38, 40-41 and 46, the term "and/or" is not supported by the specification as the detailed description does not describe all combinations thereof. To expedite the prosecution of the case, Examiner will interpret all instances of "and/or" as an "or" function.

7. Regarding Claim 37, as claimed, it is unclear what the redundant device, redundant functional module or redundant monitoring system are actually backing-up.

8. Regarding Claim 39, the term "auto black box" is in parentheses and therefore it is unclear whether the limitation is to be included.

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9. Regarding Claims 39 and 41, the phrase "other" in lines 6 and 11, respectively, renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

10. Claim 41 recites the limitation "those...voice data or packed...voice data" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim. Voice data has not yet been established in the claim.

11. Regarding Claim 42, the Applicant offers a selection of three groupings of cameras to be used in image comparison to determine if the person is wearing a mask. In the final limitation of the claim, the comparison is used to determine whether the mask transmits infrared, but not visible light or, neither infrared nor visible light. If one having ordinary skill assumed the selection of three digital cameras, as offered by the OR functionality of the claim language, a typical digital camera would not offer any information on infrared emittance, thus making the claim unclear on how a comparison is made without those specialized cameras.

12. Regarding Claim 44, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

13. Regarding Claim 44, the phrase "etc" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "etc"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 33, 35, 40-41 and 45-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson (US 6400835).

Regarding Claim 33, Lemelson discloses a security system employing facial recognition wherein claimed alarming and monitoring sensor is met by standard car alarm system, see Col.

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12 lns 35-36; claimed communication module is met by radio transmitter, see Col. 12 lns 39-42; claimed pickup is met by microphone, see Col. 18 lns 21-26; claimed CPU module is met by microprocessor, see Col. 11 lns 23-24; claimed camera is met by infrared electronic camera 12b and television camera 12a, see Col. 5 lns 19-20; claimed facial recognition program is met by facial-recognition algorithm and comparison database, see Col. 11 lns 24-30.

Regarding Claim 35, Lemelson further discloses a speaker 38 which plays instructions for the person to adjust their facial positioning after one or more unsuccessful scans, see Col. 11 lns 55-58.

Regarding Claim 40, Lemelson further discloses voice recognition, see Col. 18 lns 21-26.

Regarding Claim 41, see above rejection in reference to Claim 33. In addition, Lemelson teaches the system may be operable to radio transmit an alert code to a remote receiver at a monitor station that an attempt is being made to illegally drive the vehicle, see Col. 12 lns 39-42. Also, microcomputer 56 stores a record facial image of the person attempting to steal the car, see Col. 12 lns 21-23.

Regarding Claim 45, as stated above, Lemelson discloses a radio transmitter that sends an alert code to a monitoring station, see Col. 12 lns 39-43.

Regarding Claim 46, Lemelson discloses a microprocessor or microcontroller 56 which is programmed with an appropriate, known facial-recognition algorithm.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Goldberg (US 2004/0008872).

Regarding Claim 34, as stated above, Lemelson discloses infrared camera 12b, Lemelson further discloses a thermal recognition system to determine if a person is wearing a mask, see Col. 5 lns 10-16; facial expression recognition, see Col. 6 lns 19-31. Lemelson also describes that the system recognizes

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improper facial positioning and thus would determine a level of tilt of a person's face, see Col. 11 lns 38-58. Lemelson does not disclose facial ornaments identification. However, Goldberg discloses obtaining person-specific images wherein identification of a person includes the presence or absence of eyeglasses, color of eyeglasses, makeup color, jewelry, facial hair distribution, hair color and skin tone, see paras. [0134-0136]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Goldberg into the system of Lemelson because adding additional identification means would enhance the probability of a positive or negative match.

Regarding Claim 44, see above rejection in reference to Claims 33, 34 and 35. In addition, Lemelson describes the use of eigenhead algorithmic calculation but does not specifically disclose measuring distances between facial features. However, Goldberg does go into the detail that eigenhead or eigenfeature analysis does in fact measure distances between features for facial recognition, see para. [0096]

18. Claims 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Breed (US 7049945).

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Regarding Claims 36 and 38, Lemelson discloses a facial recognition system. Lemelson does not disclose a plurality of cameras inside and outside the vehicle for capturing images to be displayed on a heads up display. However, Breed teaches of a vehicular blind spot identification and monitoring system wherein a plurality of infrared devices including CCD or CMOS arrays are positioned at various places with views of the environment surrounding the vehicle, see Col. 18 lns 58-67, Col. 22 lns 60-63, Col. 23 lns 15-55 and Col. 27 lns 15-39. The artificial images are then shown on a heads-up display, see Col. 30 lns 49-50. Breed further teaches that the display could show the actual images when such displays are available, see Col. 16 lns 54-59. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Breed into the system of Lemelson in order to make the vehicle even safer. In addition, one having ordinary skill in the art would have readily recognized that the positioning of the cameras would be placed in any number of different positions as determined by routine experimentation to optimize viewing area. Also, as the Applicant points out in lines 10-15 of page 35 of the Specification, the cameras can be set-up at any position

according to design requirements and therefore, placement of the devices lacks criticality.

19. Claims 37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson.

Regarding Claim 37, Lemelson does not specifically disclose a redundant device; however, Examiner takes Official Notice that both the concept and advantages of a redundant device was well known at the time the invention was made. It would have been obvious to one having ordinary skill in the art that employing back-up devices and systems would ensure the effectiveness of the overall functionality of the system. In car alarm systems, it would have been obvious to utilize back-up devices to further protect the vehicle from theft.

Regarding Claim 42, Lemelson first discloses that a plurality of cameras are installed at four locations in the vehicle and two or more cameras may be used to permit correlation of views or added identification possibilities, see Col. 6 lns 40-64. Lemelson then discloses thermal, infrared and conventional television cameras, see Col. 5 lns 1-20. The system can be operable to require a potential driver to pass both the infrared and conventional camera scans, see Col. 5 lns 23-30. One having ordinary skill in the art at the time the

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invention was made would have readily recognized to take the system one step further and include a thermal scan to compare and determine if the person was trying to defeat the security scan by wearing a mask with an image of the authorized person for added security.

20. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Shanmugham (US 6630884).

Regarding Claim 39, Lemelson does not disclose an automobile status recorder for burst events, i.e. accidents. However, Shanmugham teaches of a surveillance system for vehicles that captures visual or audio data, see Col. 2 lns 30-67 and Col. 3 lns 18-22. Therefore, one having ordinary skill in the art at the time the invention was made would have incorporated the teachings of Shanmugham into the system of Lemelson so that in the case of an accident, law enforcement would have the ability to review the recording and dispense the proper citations to the liable persons.

21. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Applicant Admitted Prior Art (AAPA).

Regarding Claim 43, Lemelson does not disclose an anti-interference radio communication system. However, as described in the Applicant's Specification, anti-interference radio communication systems such as USA Pacific Crest Corporation's high-rate data transmission radio station EDL are well known in the art. Therefore, one having ordinary skill in the art at the time the invention was made would have incorporated the teachings of AAPA in order to increase security and decrease the likelihood of theft.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL J. WALK whose telephone number is (571)272-2960. The examiner can normally be reached on M-F: 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on (571) 272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SJW

/George A Bugg/  
Acting SPE of Art Unit 2612